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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/526,193

DATE: 04/03/2000
TIME: 11:10:05

Input Set: I526193.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

ENTERED
RECEIVED

APR 16 2001

TECH CENTER 1600/2900

1 <110> APPLICANT: Hayden, Michael R.
2 Wilson, Angela R.
3 Pimstone, Simon N.
4 <120> TITLE OF INVENTION: METHODS AND REAGENTS FOR MODULATING
5 CHOLESTEROL LEVELS
6 <130> FILE REFERENCE: 50110/002005
7 <140> CURRENT APPLICATION NUMBER: US/09/526,193
8 <141> CURRENT FILING DATE: 2000-03-15
9 <150> EARLIER APPLICATION NUMBER: 60/124,702
10 <151> EARLIER FILING DATE: 1999-03-15
11 <150> EARLIER APPLICATION NUMBER: 60/138,048
12 <151> EARLIER FILING DATE: 1999-06-08
13 <150> EARLIER APPLICATION NUMBER: 60/139,600
14 <151> EARLIER FILING DATE: 1999-06-17
15 <150> EARLIER APPLICATION NUMBER: 60/151,977
16 <151> EARLIER FILING DATE: 1999-09-01
17 <160> NUMBER OF SEQ ID NOS: 287
18 <170> SOFTWARE: FastSEQ for Windows Version 4.0
19 <210> SEQ ID NO 1
20 <211> LENGTH: 2261
21 <212> TYPE: PRT
22 <213> ORGANISM: Homo sapiens
23 <400> SEQUENCE: 1
24 Met Ala Cys Trp Pro Gln Leu Arg Leu Leu Leu Trp Lys Asn Leu Thr
25 1 5 10 15
26 Phe Arg Arg Arg Gln Thr Cys Gln Leu Leu Glu Val Ala Trp Pro
27 20 25 30
28 Leu Phe Ile Phe Leu Ile Leu Ile Ser Val Arg Leu Ser Tyr Pro Pro
29 35 40 45
30 Tyr Glu Gln His Glu Cys His Phe Pro Asn Lys Ala Met Pro Ser Ala
31 50 55 60
32 Gly Thr Leu Pro Trp Val Gln Gly Ile Ile Cys Asn Ala Asn Asn Pro
33 65 70 75 80
34 Cys Phe Arg Tyr Pro Thr Pro Gly Glu Ala Pro Gly Val Val Gly Asn
35 85 90 95
36 Phe Asn Lys Ser Ile Val Ala Arg Leu Phe Ser Asp Ala Arg Arg Leu
37 100 105 110
38 Leu Leu Tyr Ser Gln Lys Asp Thr Ser Met Lys Asp Met Arg Lys Val
39 115 120 125
40 Leu Arg Thr Leu Gln Gln Ile Lys Lys Ser Ser Ser Asn Leu Lys Leu
41 130 135 140
42 Gln Asp Phe Leu Val Asp Asn Glu Thr Phe Ser Gly Phe Leu Tyr His
43 145 150 155 160
44 Asn Leu Ser Leu Pro Lys Ser Thr Val Asp Lys Met Leu Arg Ala Asp

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45					165				170				175
46	Val	Ile	Leu	His	Lys	Val	Phe	Leu	Gln	Gly	Tyr	Gln	Leu
47					180				185				190
48	Ser	Leu	Cys	Asn	Gly	Ser	Lys	Ser	Glu	Glu	Met	Ile	Gln
49					195				200				205
50	Gln	Glu	Val	Ser	Glu	Leu	Cys	Gly	Leu	Pro	Arg	Glu	Lys
51					210				215				220
52	Ala	Glu	Arg	Val	Leu	Arg	Ser	Asn	Met	Asp	Ile	Leu	Lys
53					225				230				235
54	Arg	Thr	Leu	Asn	Ser	Thr	Ser	Pro	Phe	Pro	Ser	Lys	Glu
55					245				250				255
56	Ala	Thr	Lys	Thr	Leu	Leu	His	Ser	Leu	Gly	Thr	Leu	Ala
57					260				265				270
58	Phe	Ser	Met	Arg	Ser	Trp	Ser	Asp	Met	Arg	Gln	Glu	Val
59					275				280				285
60	Thr	Asn	Val	Asn	Ser	Ser	Ser	Ser	Ser	Thr	Gln	Ile	Tyr
61					290				295				300
62	Ser	Arg	Ile	Val	Cys	Gly	His	Pro	Glu	Gly	Gly	Gly	Leu
63					305				310				315
64	Ser	Leu	Asn	Trp	Tyr	Glu	Asp	Asn	Asn	Tyr	Lys	Ala	Leu
65					325				330				335
66	Asn	Gly	Thr	Glu	Glu	Asp	Ala	Glu	Thr	Phe	Tyr	Asp	Asn
67					340				345				350
68	Pro	Tyr	Cys	Asn	Asp	Leu	Met	Lys	Asn	Leu	Glu	Ser	Ser
69					355				360				365
70	Arg	Ile	Ile	Trp	Lys	Ala	Leu	Lys	Pro	Leu	Leu	Val	Gly
71					370				375				380
72	Tyr	Thr	Pro	Asp	Thr	Pro	Ala	Thr	Arg	Gln	Val	Met	Ala
73					385				390				395
74	Lys	Thr	Phe	Gln	Glu	Leu	Ala	Val	Phe	His	Asp	Leu	Glu
75					405				410				415
76	Glu	Glu	Leu	Ser	Pro	Lys	Ile	Trp	Thr	Phe	Met	Glu	Asn
77					420				425				430
78	Met	Asp	Leu	Val	Arg	Met	Leu	Leu	Asp	Ser	Arg	Asp	Asn
79					435				440				445
80	Trp	Glu	Gln	Gln	Leu	Asp	Gly	Leu	Asp	Trp	Thr	Ala	Gln
81					450				455				460
82	Ala	Phe	Leu	Ala	Lys	His	Pro	Glu	Asp	Val	Gln	Ser	Ser
83					465				470				475
84	Val	Tyr	Thr	Trp	Arg	Glu	Ala	Phe	Asn	Glu	Thr	Asn	Gln
85					485				490				495
86	Thr	Ile	Ser	Arg	Phe	Met	Glu	Cys	Val	Asn	Leu	Asn	Lys
87					500				505				510
88	Ile	Ala	Thr	Glu	Val	Trp	Leu	Ile	Asn	Lys	Ser	Met	Glu
89					515				520				525
90	Glu	Arg	Lys	Phe	Trp	Ala	Gly	Ile	Val	Phe	Thr	Gly	Ile
91					530				535				540
92	Ser	Ile	Glu	Leu	Pro	His	Val	Lys	Tyr	Lys	Ile	Arg	Met
93					545				550				555
94	Asp	Asn	Val	Glu	Arg	Thr	Asn	Lys	Ile	Lys	Asp	Gly	Tyr

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95				565				570				575		
96	Gly	Pro	Arg	Ala	Asp	Pro	Phe	Glu	Asp	Met	Arg	Tyr	Val	Trp
97				580				585				590		
98	Phe	Ala	Tyr	Leu	Gln	Asp	Val	Val	Glu	Gln	Ala	Ile	Ile	Arg
99			595					600				605		
100	Thr	Gly	Thr	Glu	Lys	Lys	Thr	Gly	Val	Tyr	Met	Gln	Gln	Met
101		610					615				620			
102	Pro	Cys	Tyr	Val	Asp	Asp	Ile	Phe	Leu	Arg	Val	Met	Ser	Arg
103						630					635			640
104	Pro	Leu	Phe	Met	Thr	Leu	Ala	Trp	Ile	Tyr	Ser	Val	Ala	Val
105				645						650				655
106	Lys	Gly	Ile	Val	Tyr	Glu	Lys	Glu	Ala	Arg	Leu	Lys	Glu	Thr
107			660							665				670
108	Ile	Met	Gly	Leu	Asp	Asn	Ser	Ile	Leu	Trp	Phe	Ser	Trp	Phe
109			675							680			685	
110	Ser	Leu	Ile	Pro	Leu	Leu	Val	Ser	Ala	Gly	Leu	Leu	Val	Val
111		690					695					700		
112	Lys	Leu	Gly	Asn	Leu	Leu	Pro	Tyr	Ser	Asp	Pro	Ser	Val	Val
113						710					715			720
114	Phe	Leu	Ser	Val	Phe	Ala	Val	Val	Thr	Ile	Leu	Gln	Cys	Phe
115				725						730				735
116	Ser	Thr	Leu	Phe	Ser	Arg	Ala	Asn	Leu	Ala	Ala	Ala	Cys	Gly
117			740						745				750	
118	Ile	Tyr	Phe	Thr	Leu	Tyr	Leu	Pro	Tyr	Val	Leu	Cys	Val	Ala
119		755					760					765		
120	Asp	Tyr	Val	Gly	Phe	Thr	Leu	Lys	Ile	Phe	Ala	Ser	Leu	Leu
121		770				775					780			
122	Val	Ala	Phe	Gly	Phe	Gly	Cys	Glu	Tyr	Phe	Ala	Leu	Phe	Glu
123		785			790						795			800
124	Gly	Ile	Gly	Val	Gln	Trp	Asp	Asn	Leu	Phe	Glu	Ser	Pro	Val
125				805						810				815
126	Asp	Gly	Phe	Asn	Leu	Thr	Thr	Ser	Val	Ser	Met	Met	Leu	Phe
127			820						825				830	
128	Phe	Leu	Tyr	Gly	Val	Met	Thr	Trp	Tyr	Ile	Glu	Ala	Val	Phe
129		835					840					845		
130	Gln	Tyr	Gly	Ile	Pro	Arg	Pro	Trp	Tyr	Phe	Pro	Cys	Thr	Lys
131		850					855					860		
132	Trp	Phe	Gly	Glu	Glu	Ser	Asp	Glu	Lys	Ser	His	Pro	Gly	Ser
133		865			870					875				880
134	Lys	Arg	Ile	Ser	Glu	Ile	Cys	Met	Glu	Glu	Pro	Thr	His	Leu
135				885						890				895
136	Leu	Gly	Val	Ser	Ile	Gln	Asn	Leu	Val	Lys	Val	Tyr	Arg	Asp
137			900						905				910	
138	Lys	Val	Ala	Val	Asp	Gly	Leu	Ala	Leu	Asn	Phe	Tyr	Glu	Gly
139		915					920						925	
140	Thr	Ser	Phe	Leu	Gly	His	Asn	Gly	Ala	Gly	Lys	Thr	Thr	Met
141		930					935					940		
142	Ile	Leu	Thr	Gly	Leu	Phe	Pro	Pro	Thr	Ser	Gly	Thr	Ala	Tyr
143		945			950						955			960
144	Gly	Lys	Asp	Ile	Arg	Ser	Glu	Met	Ser	Thr	Ile	Arg	Gln	Asn

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145		965		970		975
146	Val Cys Pro Gln His Asn Val Leu Phe Asp Met Leu Thr Val Glu Glu					
147		980		985		990
148	His Ile Trp Phe Tyr Ala Arg Leu Lys Gly Leu Ser Glu Lys His Val					
149		995		1000		1005
150	Lys Ala Glu Met Glu Gln Met Ala Leu Asp Val Gly Leu Pro Ser Ser					
151		1010		1015		1020
152	Lys Leu Lys Ser Lys Thr Ser Gln Leu Ser Gly Gly Met Gln Arg Lys					
153		1025		1030		1035
154	Leu Ser Val Ala Leu Ala Phe Val Gly Gly Ser Lys Val Val Ile Leu					
155		1045		1050		1055
156	Asp Glu Pro Thr Ala Gly Val Asp Pro Tyr Ser Arg Arg Gly Ile Trp					
157		1060		1065		1070
158	Glu Leu Leu Leu Lys Tyr Arg Gln Gly Arg Thr Ile Ile Leu Ser Thr					
159		1075		1080		1085
160	His His Met Asp Glu Ala Asp Val Leu Gly Asp Arg Ile Ala Ile Ile					
161		1090		1095		1100
162	Ser His Gly Lys Leu Cys Cys Val Gly Ser Ser Leu Phe Leu Lys Asn					
163		1105		1110		1115
164	Gln Leu Gly Thr Gly Tyr Tyr Leu Thr Leu Val Lys Lys Asp Val Glu					
165		1125		1130		1135
166	Ser Ser Leu Ser Ser Cys Arg Asn Ser Ser Ser Thr Val Ser Tyr Leu					
167		1140		1145		1150
168	Lys Lys Glu Asp Ser Val Ser Gln Ser Ser Ser Asp Ala Gly Leu Gly					
169		1155		1160		1165
170	Ser Asp His Glu Ser Asp Thr Leu Thr Ile Asp Val Ser Ala Ile Ser					
171		1170		1175		1180
172	Asn Leu Ile Arg Lys His Val Ser Glu Ala Arg Leu Val Glu Asp Ile					
173		1185		1190		1195
174	Gly His Glu Leu Thr Tyr Val Leu Pro Tyr Glu Ala Ala Lys Glu Gly					
175		1205		1210		1215
176	Ala Phe Val Glu Leu Phe His Glu Ile Asp Asp Arg Leu Ser Asp Leu					
177		1220		1225		1230
178	Gly Ile Ser Ser Tyr Gly Ile Ser Glu Thr Thr Leu Glu Glu Ile Phe					
179		1235		1240		1245
180	Leu Lys Val Ala Glu Glu Ser Gly Val Asp Ala Glu Thr Ser Asp Gly					
181		1250		1255		1260
182	Thr Leu Pro Ala Arg Arg Asn Arg Arg Ala Phe Gly Asp Lys Gln Ser					
183		1265		1270		1275
184	Cys Leu Arg Pro Phe Thr Glu Asp Asp Ala Ala Asp Pro Asn Asp Ser					
185		1285		1290		1295
186	Asp Ile Asp Pro Glu Ser Arg Glu Thr Asp Leu Leu Ser Gly Met Asp					
187		1300		1305		1310
188	Gly Lys Gly Ser Tyr Gln Val Lys Gly Trp Lys Leu Thr Gln Gln Gln					
189		1315		1320		1325
190	Phe Val Ala Leu Leu Trp Lys Arg Leu Leu Ile Ala Arg Arg Ser Arg					
191		1330		1335		1340
192	Lys Gly Phe Phe Ala Gln Ile Val Leu Pro Ala Val Phe Val Cys Ile					
193		1345		1350		1355
194	Ala Leu Val Phe Ser Leu Ile Val Pro Pro Phe Gly Lys Tyr Pro Ser					1360

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195		1365		1370		1375	
196	Leu Glu Leu Gln Pro Trp Met Tyr Asn Glu Gln Tyr Thr Phe Val Ser						
197		1380		1385		1390	
198	Asn Asp Ala Pro Glu Asp Thr Gly Thr Leu Glu Leu Leu Asn Ala Leu						
199		1395		1400		1405	
200	Thr Lys Asp Pro Gly Phe Gly Thr Arg Cys Met Glu Gly Asn Pro Ile						
201		1410		1415		1420	
202	Pro Asp Thr Pro Cys Gln Ala Gly Glu Glu Glu Trp Thr Thr Ala Pro						
203		1425		1430		1435	1440
204	Val Pro Gln Thr Ile Met Asp Leu Phe Gln Asn Gly Asn Trp Thr Met						
205		1445		1450		1455	
206	Gln Asn Pro Ser Pro Ala Cys Gln Cys Ser Ser Asp Lys Ile Lys Lys						
207		1460		1465		1470	
208	Met Leu Pro Val Cys Pro Pro Gly Ala Gly Gly Leu Pro Pro Pro Gln						
209		1475		1480		1485	
210	Arg Lys Gln Asn Thr Ala Asp Ile Leu Gln Asp Leu Thr Gly Arg Asn						
211		1490		1495		1500	
212	Ile Ser Asp Tyr Leu Val Lys Thr Tyr Val Gln Ile Ile Ala Lys Ser						
213		1505		1510		1515	1520
214	Leu Lys Asn Lys Ile Trp Val Asn Glu Phe Arg Tyr Gly Gly Phe Ser						
215		1525		1530		1535	
216	Leu Gly Val Ser Asn Thr Gln Ala Leu Pro Pro Ser Gln Glu Val Asn						
217		1540		1545		1550	
218	Asp Ala Ile Lys Gln Met Lys Lys His Leu Lys Leu Ala Lys Asp Ser						
219		1555		1560		1565	
220	Ser Ala Asp Arg Phe Leu Asn Ser Leu Gly Arg Phe Met Thr Gly Leu						
221		1570		1575		1580	
222	Asp Thr Arg Asn Asn Val Lys Val Trp Phe Asn Asn Lys Gly Trp His						
223		1585		1590		1595	1600
224	Ala Ile Ser Ser Phe Leu Asn Val Ile Asn Asn Ala Ile Leu Arg Ala						
225		1605		1610		1615	
226	Asn Leu Gln Lys Gly Glu Asn Pro Ser His Tyr Gly Ile Thr Ala Phe						
227		1620		1625		1630	
228	Asn His Pro Leu Asn Leu Thr Lys Gln Gln Leu Ser Glu Val Ala Leu						
229		1635		1640		1645	
230	Met Thr Thr Ser Val Asp Val Leu Val Ser Ile Cys Val Ile Phe Ala						
231		1650		1655		1660	
232	Met Ser Phe Val Pro Ala Ser Phe Val Val Phe Leu Ile Gln Glu Arg						
233		1665		1670		1675	1680
234	Val Ser Lys Ala Lys His Leu Gln Phe Ile Ser Gly Val Lys Pro Val						
235		1685		1690		1695	
236	Ile Tyr Trp Leu Ser Asn Phe Val Trp Asp Met Cys Asn Tyr Val Val						
237		1700		1705		1710	
238	Pro Ala Thr Leu Val Ile Ile Ile Phe Ile Cys Phe Gln Gln Lys Ser						
239		1715		1720		1725	
240	Tyr Val Ser Ser Thr Asn Leu Pro Val Leu Ala Leu Leu Leu Leu						
241		1730		1735		1740	
242	Tyr Gly Trp Ser Ile Thr Pro Leu Met Tyr Pro Ala Ser Phe Val Phe						
243		1745		1750		1755	1760
	Lys Ile Pro Ser Thr Ala Tyr Val Val Leu Thr Ser Val Asn Leu Phe						

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.



Input Set: I526193.RAW

Line	?	Error/Warning	Original Text
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947	W	"N" or "Xaa" used: Feature required	gagttggact ntggattttt ctttgcaaga gggacaag
1460	W	"N" or "Xaa" used: Feature required	ttttcctatg aggcacanaag agtgaaggag aaggctct
1994	W	"N" or "Xaa" used: Feature required	ngccnngttn aaaangaaaa tttnnnnnaa attnaann
1995	W	"N" or "Xaa" used: Feature required	aaaaacnaaa angatttccn ccnngggggg nccccna
1996	W	"N" or "Xaa" used: Feature required	gnggngaggg aaagnntttt ttggaatttt taattttt
2146	W	"N" or "Xaa" used: Feature required	gcctgtgngt cccc
2248	W	"N" or "Xaa" used: Feature required	tcattcctct tgtnnngcncn gnncn
2298	W	"N" or "Xaa" used: Feature required	tgatgaagat gananncn gn ngcga
2354	W	"N" or "Xaa" used: Feature required	agttgtanga atag